

WHAT IS CLAIMED IS:

1. A method for generating a batch configuration document for an intelligent device,
5 the method comprising:

accessing a plurality of configuration files on the intelligent device, wherein each
of the one or more configuration files includes configuration information
for one of a plurality of software components of the intelligent device; and

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generating the batch configuration document from the plurality of configuration
files, wherein the batch configuration document includes the configuration
information for the plurality of software components of the intelligent
device;

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wherein, after said generating, the batch configuration document is accessible for
use in configuring the plurality of software components of the intelligent
device whose configuration files were used in said generating the batch
configuration document.

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2. The method as recited in claim 1, wherein said accessing the plurality of
configuration files and said generating the batch configuration document are performed
by executing a script on the intelligent device, wherein the script includes one or more
executable instructions for selecting the plurality of configuration files to be accessed and
25 one or more executable instructions for performing said generating the batch
configuration document.

3. The method as recited in claim 1, further comprising, prior to said accessing the
plurality of configuration files, configuring the plurality of software components of the

intelligent device, wherein said configuring the plurality of software components sets the configuration information in the plurality of configuration files.

4. The method as recited in claim 1, further comprising transferring the batch
5 configuration document to another intelligent device for use in configuring one or more software components of the other intelligent device.

5. The method as recited in claim 1, wherein the batch configuration document
further includes configuration information for one or more software components of one or
10 more other intelligent devices.

6. The method as recited in claim 1, wherein said generating the batch configuration
document comprises generating a Document Object Model (DOM) tree from each of the
accessed configuration files, wherein the configuration information incorporated in the
15 configuration document is accessed from the DOM trees generated from the plurality of configuration files.

7. The method as recited in claim 1, further comprising configuring one or more of
the plurality of software components of the intelligent device using the batch
20 configuration document, wherein said configuring comprises applying the configuration information from the batch configuration document to one or more of the plurality of configuration files, wherein each of the one or more of the plurality of configuration files is associated with one of the one or more of the plurality of software components of the intelligent device.

8. The method as recited in claim 7, wherein said configuring the one or more of the
plurality of software components of the intelligent device further comprises initializing
each of the one or more of the plurality of software components, wherein said initializing
uses the configuration information from the one or more configuration files associated
30 with the particular component.

9. The method as recited in claim 1, wherein the plurality of software components includes software application programs.

5 10. The method as recited in claim 1, wherein the plurality of software components includes system software components.

11. The method as recited in claim 1, wherein the plurality of software components includes software drivers for hardware components.

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12. The method as recited in claim 1, wherein at least one of the plurality of configuration files includes operating system configuration information for the intelligent device.

15 13. The method as recited in claim 1, wherein the batch configuration document is a markup language document.

14. The method as recited in claim 13, wherein the markup language is eXtensible Markup Language (XML).

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15. The method as recited in claim 1, wherein the batch configuration document and the plurality of configuration files conform to an eXtensible Markup Language (XML) Document Type Definition (DTD).

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16. A method for configuring a plurality of software components of an intelligent device, the method comprising:

accessing a batch configuration document, wherein the batch configuration document comprises configuration information for the plurality of software components of the intelligent device; and

5 applying the configuration information from the batch configuration document to one or more configuration files on the intelligent device, wherein each of the one or more configuration files includes configuration information for one of the plurality of software components of the intelligent device.

10 17. The method as recited in claim 16, wherein said applying the configuration information from the batch configuration document to each of the one or more configuration files comprises replacing one or more current parameter values in the particular configuration file with new parameter values from the batch configuration document.

15 18. The method as recited in claim 16, wherein said accessing and said applying are performed by executing a script on the intelligent device, wherein the script includes one or more executable instructions for accessing the batch configuration document and one or more executable instructions for selecting the one or more configuration files to be
20 configured.

19. The method as recited in claim 16, wherein said accessing the batch configuration document comprises generating a Document Object Model (DOM) tree from the batch configuration document, wherein the DOM tree includes the configuration information
25 for the one or more configuration files.

20. The method as recited in claim 19, wherein said applying the configuration information to the one or more configuration files comprises accessing the configuration information from the DOM tree generated from the batch configuration document.

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21. The method as recited in claim 16, wherein said accessing the batch configuration document comprises generating a Document Object Model (DOM) tree for each of the one or more configuration files from the configuration information in the batch configuration document, wherein each of the generated DOM trees comprises the configuration information for its associated configuration file.

22. The method as recited in claim 21, wherein, said applying the configuration information comprises:

for each of one or more of the plurality of software components of the intelligent device:

calling a module associated with the component;

passing a DOM tree generated from one of the one or more configuration files to the called module, wherein the configuration file is associated with the component, and wherein the DOM tree includes configuration information for the component; and

the called module applying the configuration information from the DOM tree to the configuration file associated with the component.

23. The method as recited in claim 16, wherein the plurality of software components includes one or more of software application programs.

24. The method as recited in claim 16, wherein the plurality of software components includes system software components.

25. The method as recited in claim 16, wherein the plurality of software components includes software drivers for hardware components.

26. The method as recited in claim 16, wherein at least one of the one or more configuration files includes operating system configuration information for the intelligent device.

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27. The method as recited in claim 16, wherein the batch configuration document is a markup language document.

28. The method as recited in claim 27, wherein the markup language is eXtensible Markup Language (XML).
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29. The method as recited in claim 16, wherein the batch configuration document and the one or more configuration files conform to an eXtensible Markup Language (XML) Document Type Definition (DTD).
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30. The method as recited in claim 16, further comprising rebooting the intelligent device after said applying the configuration information from the batch configuration document to the one or more configuration files, wherein said rebooting applies the configuration information from the one or more configuration files to one or more of the plurality of software components of the intelligent device.
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31. The method as recited in claim 16, further comprising initializing one or more of the plurality of software components of the intelligent device after said applying the configuration information from the batch configuration document to the one or more configuration files, wherein, in said initializing, each of the one or more of the plurality of software components is initialized using the configuration information from each of the one or more configuration files associated with the particular component.
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32. The method as recited in claim 16, further comprising generating the batch configuration document on a different intelligent device prior to said accessing.
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33. A method for configuring intelligent devices, the method comprising:

5 generating a batch configuration document from a plurality of configuration files
on a first intelligent device, wherein each of the plurality of configuration
files includes configuration information for one of one or more software
components of the intelligent device, and wherein the batch configuration
document includes the configuration information from the plurality of
10 configuration files; and

configuring one or more software components of a second intelligent device using
the batch configuration document generated on the first intelligent device.

15 34. The method as recited in claim 33, wherein said configuring comprises applying
configuration information from the batch configuration document generated on the first
intelligent device to one or more configuration files on the second device, wherein each
of the one or more configuration files on the second intelligent device is associated with
one of the one or more software components of the second intelligent device.

20 35. The method as recited in claim 33, wherein the batch configuration document is a
markup language document.

36. The method as recited in claim 35, wherein the markup language is eXtensible
25 Markup Language (XML), and wherein the batch configuration document and the
plurality of configuration files conform to an XML Document Type Definition (DTD).

37. The method as recited in claim 33, wherein the one or more software components
include one or more of software application programs, system software components, and
30 software drivers for hardware components.

38. The method as recited in claim 33, wherein at least one of the plurality of configuration files on the first intelligent device includes operating system configuration information for the first intelligent device, wherein the batch configuration document
5 includes the operating system configuration information, and wherein said configuring the one or more software components of the second intelligent device comprises configuring an operating system of the second intelligent device using the operating system configuration information of the first intelligent device from the batch configuration document.

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39. The method as recited in claim 33, further comprising rebooting the second intelligent device after said configuring, wherein said rebooting applies the configuration information from the batch configuration document to the one or more software components of the second intelligent device.

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40. The method as recited in claim 33, further comprising:

storing the generated batch configuration document on a server, wherein the
server is coupled to the second intelligent device via a network; and

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downloading the stored batch configuration document to the second intelligent
device;

wherein said configuring the one or more software components of the second
25 intelligent device uses the downloaded batch configuration document.

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41. A method for generating a batch configuration document for a plurality of intelligent devices, the method comprising:

accessing one or more configuration files on each of the plurality of intelligent devices, wherein each of the one or more configuration files on each of the plurality of intelligent devices includes configuration information for one of one or more software components of the intelligent device; and

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generating the batch configuration document from the one or more configuration files on each of the plurality of intelligent devices, wherein the batch configuration document includes the configuration information for the one or more software components of each of the plurality of intelligent devices;

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wherein, after said generating, the batch configuration document is accessible for use in configuring the plurality of intelligent devices whose configuration files were used in said generating the batch configuration document.

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42. The method as recited in claim 41, wherein the batch configuration document is further accessible for use in configuring other pluralities of intelligent devices.

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43. The method as recited in claim 41, wherein said configuring the plurality of intelligent devices comprises applying the configuration information from the batch configuration document to the one or more configuration files for each of the one or more software components of each of the plurality of intelligent devices.

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44. The method as recited in claim 41, wherein the one or more software components of each of the plurality of intelligent devices includes at least one of software application programs, system software components, and software drivers for hardware components.

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45. The method as recited in claim 41, wherein at least one of the configuration files of at least one of the plurality of intelligent devices includes operating system configuration information for the intelligent device.

46. The method as recited in claim 41, wherein the batch configuration document is a markup language document.

5 47. The method as recited in claim 46, wherein the markup language is eXtensible Markup Language (XML), and wherein the batch configuration document and each of the one or more configuration files on each of the plurality of intelligent devices conform to an eXtensible Markup Language (XML) Document Type Definition (DTD).

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48. An intelligent device, comprising:

a processor;

15 a plurality of software components;

a plurality of configuration files, wherein each of the plurality of configuration files is associated with one of the plurality of software components, and wherein each of the plurality of configuration files includes configuration information for its
20 associated component; and

a memory operable to store program instructions, wherein the program instructions are executable by the processor to:

25 open each of the plurality of configuration files to access the configuration information for the component associated with the configuration file; and

generate a batch configuration document from the configuration information accessed from each of the plurality of configuration files;

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wherein the batch configuration document includes the configuration information from each of the plurality of configuration files; and

5 wherein, after said generating, the batch configuration document is accessible for use in configuring the plurality of software components in the intelligent device.

49. The intelligent device as recited in claim 48, wherein the batch configuration document is further transferable to another intelligent device comprising one or more software components similar to software components comprised in the plurality of software components of the intelligent device for use in configuring the other intelligent device.

50. The intelligent device as recited in claim 48, wherein, in said generating the batch configuration document, the program instructions are further executable by the processor to generate a Document Object Model (DOM) tree from each of the plurality of configuration files, wherein the configuration information included in the configuration document is accessed from the DOM trees generated from the plurality of configuration files.

51. The intelligent device as recited in claim 48, wherein, in said configuring the plurality of software components of the intelligent device, the program instructions are further executable by the processor to apply the configuration information from the batch configuration document to the one or more configuration files for each of the plurality of software components of the intelligent device.

52. The intelligent device as recited in claim 48, wherein the plurality of software components includes one or more of software application programs, system software components, and software drivers for hardware components.

53. The intelligent device as recited in claim 48, wherein the intelligent device further comprises an operating system for the intelligent device, and wherein at least one of the plurality of configuration files includes operating system configuration information for the intelligent device.

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54. The intelligent device as recited in claim 48, wherein the batch configuration document is a markup language document.

55. The intelligent device as recited in claim 54, wherein the markup language is eXtensible Markup Language (XML), and wherein the batch configuration document and the plurality of configuration files conform to an eXtensible Markup Language (XML) Document Type Definition (DTD).

56. An intelligent device, comprising:

a processor;

a plurality of software components;

a plurality of configuration files, wherein each of the plurality of configuration files is associated with one of the plurality of software components, and wherein each of the plurality of configuration files includes configuration information for its associated component; and

a memory operable to store program instructions, wherein the program instructions are executable by the processor to:

open a batch configuration document, wherein the batch configuration document comprises configuration information for the plurality of software components of the intelligent device; and

5 apply the configuration information from the batch configuration document to the plurality of configuration files on the intelligent device.

57. The intelligent device as recited in claim 56, wherein the program instructions are further executable by the processor to:

10 generate a Document Object Model (DOM) tree from the batch configuration document, wherein the DOM tree includes the configuration information for the plurality of configuration files; and

15 wherein, in said applying the configuration information to the plurality of configuration files, the program instructions are further executable by the processor to access the configuration information from the DOM tree generated from the batch configuration document.

20 58. The intelligent device as recited in claim 56, wherein, in said accessing the batch configuration document, the program instructions are further executable by the processor to:

25 generate a Document Object Model (DOM) tree for each of the plurality of configuration files from the configuration information in the batch configuration document, wherein each of the generated DOM trees comprises the configuration information for its associated configuration file;

wherein the intelligent device further comprises a plurality of executable modules each associated with one of the plurality of software components, wherein each of the plurality of executable modules is operable to apply configuration information to the particular one of the plurality of configuration files associated with the component associated with the executable module.

59. The intelligent device as recited in claim 56, wherein, in said applying the configuration information to the plurality of configuration files, the program instructions are further executable by the processor to:

for each of the plurality of software components of the intelligent device:

call one of the plurality of modules, wherein the called module is associated with the component; and

pass a DOM tree generated from one of the plurality of configuration files to the called module, wherein the configuration file is associated with the component, and wherein the DOM tree includes configuration information for the component; and

wherein the called module is operable to apply the configuration information from the DOM tree to the configuration file associated with the component.

60. The intelligent device as recited in claim 56, wherein the plurality of software components includes one or more of software application programs, system software components, and software drivers for hardware components.

61. The intelligent device as recited in claim 56, wherein the intelligent device further comprises an operating system for the intelligent device, and wherein at least one of the

plurality of configuration files includes operating system configuration information for the intelligent device.

62. The intelligent device as recited in claim 56, wherein the batch configuration document is a markup language document.

63. The intelligent device as recited in claim 62, wherein the markup language is eXtensible Markup Language (XML), and wherein the batch configuration document and the one or more configuration files conform to an eXtensible Markup Language (XML) Document Type Definition (DTD).

64. The intelligent device as recited in claim 56, wherein the intelligent devices is operable to reboot after said configuring, wherein said rebooting applies the configuration information to the plurality of software components of the intelligent device.

65. The intelligent device as recited in claim 56, wherein the program instructions are further executable by the processor to initialize each of the plurality of software components of the intelligent device, wherein said initializing uses the configuration information from the one or more configuration files associated with the particular component.

66. A carrier medium comprising program instructions, wherein the program instructions are computer-executable to implement:

accessing a plurality of configuration files on an intelligent device, wherein each of the plurality of configuration files includes configuration information for one of a plurality of software components of the intelligent device; and

generating a batch configuration document from the plurality of configuration files, wherein the batch configuration document includes the configuration information for the plurality of software components of the intelligent device;

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wherein, after said generating, the batch configuration document is accessible for use in configuring the plurality of software components of the intelligent device whose configuration files were used in said generating the batch configuration document.

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67. The carrier medium as recited in claim 66, wherein, in said generating the batch configuration document, the program instructions are further computer-executable to implement generating a Document Object Model (DOM) tree from each of the plurality of accessed configuration files, wherein the configuration information incorporated in the configuration document is accessed from the DOM trees generated from the plurality of configuration files.

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68. The carrier medium as recited in claim 66, wherein the program instructions are further computer-executable to implement:

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configuring one or more of the plurality of software components of the intelligent device using the batch configuration document;

wherein, in said configuring, the program instructions are further computer-executable to implement applying the configuration information from the batch configuration document to one or more of the plurality of configuration files, wherein each of the one or more of the plurality of configuration files is associated with one of the one or more of the plurality of software components of the intelligent device.

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69. The carrier medium as recited in claim 66, wherein the batch configuration document is a markup language document, wherein the markup language is eXtensible Markup Language (XML), and wherein the batch configuration document and the one or more configuration files conform to an XML Document Type Definition (DTD).

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70. A carrier medium comprising program instructions, wherein the program instructions are computer-executable to implement:

10 accessing a batch configuration document, wherein the batch configuration document comprises configuration information for a plurality of software components of an intelligent device; and

15 applying the configuration information from the batch configuration document to one or more configuration files on the intelligent device, wherein each of the one or more configuration files includes configuration information for one of the plurality of software components of the intelligent device.

20 71. The carrier medium as recited in claim 70, wherein, in said accessing the batch configuration document, the program instructions are computer-executable to implement:

25 generating a Document Object Model (DOM) tree from the batch configuration document, wherein the DOM tree includes the configuration information for the plurality of configuration files;

30 wherein, in said applying the configuration information to the one or more configuration files, the program instructions are computer-executable to implement accessing the configuration information from the DOM tree generated from the batch configuration document.

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